



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/044,501 | 01/10/2002 | Douglas W. Babcock | Analog 5167CIP | 3494 |

7590 05/28/2003
Samuels, Gauthier & Stevens LLP
Suite 3300
225 Franklin Street
Boston, MA 02110

EXAMINER

NGUYEN, VINH P

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2829

DATE MAILED: 05/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,501

Applicant(s)

BABCOCK, DOUGLAS W. CH

Examiner

VINH P NGUYEN

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is unclear from the specification how the apparatus of figure 7 is interconnected and associated with the apparatus of figures 1-6. Therefore the operation of the apparatus of figure 7 is not well understood.

Furthermore, it appears that the specification does not have sufficient information about “a controlled cascode tranlinear multiplier cell configuration” and “a low distortion means for controlling the amplitude”. It is unclear what “a controlled cascode tranlinear multiplier cell configuration” and “a low distortion means for controlling the amplitude” are.

4. Claims 1-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear how a high speed slave chain” and “a DC control loop chain” are interconnected and associated with a controller. Furthermore, it is unclear what “a controller” represents. Is it shown in any of drawings?

In claim 9, it is unclear what “a controlled cascode translinear multiplier cell configuration” and “a low distortion means for controlling the amplitude” represent. Are they shown in any of drawings?

In claim 11, it is unclear what “ a resistor of the said driver” represents. Is it shown in any of drawings?

In claim 13, it is unclear what “ a differential input pair of transistors ” represents. Are they shown in any of drawings?

In claim 14, , it is unclear what “ a pair of transistors that receive a single ended voltage signal” represents. Are they shown in any of drawings?

In claims 15 and 17, it is unclear what “a resistance” represents. Is it shown in any of drawings?

In claim 19, it is unclear how a high speed slave chain” and “a DC control loop chain” are interconnected and associated with controlling means. Furthermore, it is unclear what “controlling means” represents. Is it shown in any of drawings?

In claim 27, it is unclear what “a controlled cascode translinear multiplier cell configuration” and “a low distortion means for controlling the amplitude” represent. Are they

shown in any of drawings?

In claim 29, it is unclear what “an output resistor of the said driver” represents. Is it shown in any of drawings?

In claim 31, it is unclear what “ a differential input pair of transistors ” represents. Are they shown in any of drawings?

In claim 32, it is unclear what “ a pair of transistors that receive a single ended voltage signal” represent. Are they shown in any of drawings?

In claim 33, it is unclear what “ a resistance coupled between the transistors” represents. Is it shown in any of drawings?

In claim 34, it is unclear what “ a pair of current sources” represent. Are they shown in any of drawings?

In claim 35, it is unclear what “ a resistance” represents. Is it shown in any of drawings?

In claim 37, it appears that the scope of the claim is incomplete since there is no testing steps recited in this claim. Furthermore, it is unclear where a differential voltage logic pulse train is from.

In claim 45, it is unclear what “a controlled cascode translinear multiplier cell configuration” and “a low distortion means for controlling the amplitude” represent. Are they shown in any of drawings?

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

Since claims are indefinite, no art has been applied to the instant claims.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Cheung et al (pat # 5,461,310) disclose automatic test equipment system using pin slice architecture.

Dinteman et al (Pat # 5,942,922) disclose inhibitable continuously terminated differential drive circuit for an integrated circuit tester.

Dinteman et al (Pat # 6,057,716) disclose inhibitable continuously terminated differential drive circuit for an integrated circuit tester

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.


VINH P. NGUYEN
PRIMARY EXAMINER
ART UNIT 2829
05/15/03